

Tuesday, 25 October 2022		
10.00-10.30	Registration and Informal get-together	Foyer 3
10.30-12.40	Opening Session	Room 8-9
10.30-10.40	Opening of the Symposium by prof.dr.ir. Harald van Brummelen	
10.40-11.40	Koiter lecture by Prof. Michael Ortiz	
11.40-12.10	Trends and challenges in "Machine learning" by dr.ir. Iuri Rocha (TUD)	
12.10-12.40	Trends and challenges in "Molecular and particle-based mechanics" by dr.ir. Andrea Giuntoli (RUG)	
12.45-13.45	Lunch	Sydney Room
13.50-14.50	Workshops 1 and 2, part A	
Workshop 1:	Room 4-5	Workshop 2:
Machine learning		Molecular and particle-based mechanics
13.50-14.10 Bas Kessels (TU/e)		13.50-14.10 Juan E. Alvarez (UT)
<i>Parameter Updating in Nonlinear Dynamics Models using Machine Learning-Based Inverse Mappings</i>		<i>Multi-scale thermo-viscoelastic modelling of powder-based processes</i>
14.20-14.40 Retief Lubbe (UT)		14.20-14.40 Leon Thijs (TU/e)
<i>Bayesian inference of granular mesostructures: the identifiability and interplay with grain properties</i>		<i>Investigation of single iron particle combustion in the Knudsen transition regime</i>
14.50-15.50	Poster Discussion Session I:	
	Presentation of current research projects, carried out by PhD students and Postdocs participating in Engineering Mechanics	
15.50-16.20	Break	Foyer 3
16.20-17.20	Workshops 1 and 2, part B	
Workshop 1, cont'd	Room 4-5	Workshop 2, cont'd:
Machine learning		Molecular and particle-based mechanics
16.20-16.40 Lei Zhang (RUG)		16.20-16.40 Sam van Elsloo (TUD)
<i>Atomistic fracture in bcc iron revealed by active training of machine learning potential</i>		<i>Application of the Immersed Interface Method to the Lattice Boltzmann Method</i>
16.50-17.10 Prakash Thakolkaran (TUD)		16.50-17.10 Varun Shah (RUG)
<i>Learning hyperelasticity without stress data</i>		<i>Unravelling the atomic scale interaction of H with dislocations in iron</i>
17.30-18.30	Poster Discussion Session II:	
	Presentation of current research projects, carried out by PhD students and Postdocs participating in Engineering Mechanics	
18.30-19.00	Informal reception	Sydney Room
19.00-22.00	Dinner	Sydney Room
22.00-24.00	Bar	Dug Out

Wednesday, 26 October 2022		
08.45-9.45	Plenary Session	Room 8-9
08.45-09.15	Trends and challenges in “Additive manufacturing” by Dr. ir. Hans van Dommelen (TUE)	
09.15-09.45	Trends and challenges in “Material and structural health monitoring” by Dr.ir. Richard Loendersloot (UT)	
09.45-10.45	Workshops 3 and 4, part A	
Workshop 3:	Room 6-7	Workshop 4:
Additive manufacturing		Material and structural health monitoring:
09.45-10.05 Mohammad Sattari (UT) <i>Thermo-Fluidic Behavior To Solidification Microstructure Texture Evolution During Laser- assisted Powder-based Direct Energy Deposition – An Integrated Approach</i>		09.45-10.05 Arno Huijer (TUD) <i>Monitoring of dynamic loads and acoustic emissions in composite marine propellers using embedded piezoelectric sensors</i>
10.15-10.35 Luca Palmeira Belotti (TU/e) <i>On the anisotropy of wire arc additively manufactured parts</i>		10.15-10.35 Tijmen Vermeij (TU/e) <i>Unraveling plasticity and damage in multi-phase steels through dedicated integrated “2D” experimental-numerical testing</i>
10.45 -11.15	Break	Foyer 3
11.15-12.15	Workshops 3 and 4, part B	
Workshop3, cont’d:	Room 6-7	Workshop 4, cont’d:
Additive manufacturing		Material and structural health monitoring
11.15-11.35 Vibhas Mishra (TUD) <i>Computational Design for Wire Arc Additive Manufacturing</i>		11.15-11.35 Natáli Marinho (UT) <i>Dynamic-based impact identification method for composite structures</i>
11.45-12.05 Zhaohang Zhang (RUG) <i>Additive Manufacturing of Metamaterials</i>		11.45-12.05 Aleks Vrcek (UT-ET) <i>Newly developed Cam-Roller follower Tester (CRT) with self-aligning mechanism in a line contact configuration and ways of simulating, detecting, and measuring surface initiated RCF cracks</i>
12.20- 12.50	Biezeno lecture	Room 8-9
12.50-13.15	- Announcement of winning contributions in the AIO/Postdoc Presentation contest and in the Poster contest - Closure	
13.15-14.00	Lunch	Sydney Room
14.00-15.00	Assembly of Project Leaders EM	Room 6-7
16.00-20.00	Meeting of EM Advisory Board	